Research and Development

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Project Summary

HAP-PRO User's Manual (For Use with Version 1.0)

Scott Moore

The primary purpose of the Hazardous Air Pollutant Program (HAP-PRO) is to assist permit engineers in reviewing applications for control of air toxics by calculating the capital and annual costs for 6 volatile organic compound (VOC) and 3 different particulate control devices, including selected engineering parameters, which may be used to help pinpoint errors in the engineering design. Calculations used by the program mirror those presented in the revision to the EPA Handbook, Control Technologies for Hazardous Air Toxics (EPA Document 625/6-86/014). A secondary purpose of HAP-PRO is to generate lists of all facilities containing a specified pollutant in their emission stream(s) or specified type of emission stream (organic or inorganic vapors and particulates).

This Project Summary was developed by EPA's Air and Energy Engineering Research Laboratory, Research Triangle Park, NC, to announce key findings of the research project that is fully documented in a separate report of the same title (see Project Report ordering information at back).

HAP-PRO was developed by the PES Systems Development Group of Durham,

NC. It is written in the FoxPro dialect of dBASE, a database development language, and was compiled using FoxPro version 1.02, a relational database management system developed by Fox Software of Perrysburg, OH. HAP-PRO's reports were defined with R&R Relational Report Writer, version 3B, developed by Concentric Data Systems of Westboro, MA, which may be used to modify the reports. Both products are highly rated. The installation program was developed using Install, version 2.3, from Knowledge Dynamics Corporation of Canyon Lake, TX, and modified by PES Systems Development Group. The runtime modules from all three products are distributed with HAP-PRO. No royalty payments are required by the user.

HAP-PRO's features include contextsensitive help to assist in data input, a windowed environment to provide a referential trail of the user's actions, lookup tables containing the characteristics of many common pollutants, and the ability to select air toxics either from an alphabetical list or by SIC category. HAP-PRO runs on all IBM compatible personal computers and requires a MS-DOS version 3.1 or greater, a hard disk with at least 1 megabyte free, and 512 K free minimum RAM. Scott Moore is with Pacific Environmental Services, Inc., Durham, NC 27707. Carlos M. Nunez is the EPA Project Officer (see below).

The complete report, entitled "HAP-PRO User's Manual (For Use with Version 1.0," Paper Copy (Order No. PB92-135 904/AS; Cost: \$19.00; subject to change) Diskettes (Order No. PB92-501 212/AS; Cost: \$140.00; subject to change) (Cost of diskettes includes paper copy.)

The above items will be available from:

National Technical Information Service

5285 Port Royal Road Springfield, VA 22161 Telephone: 703-487-4650

The EPA Project Officer can be contacted at:

Air and Energy Engineering Research Laboratory U.S. Environmental Protection Agency Research Triangle Park, NC 27711

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EPA/600/S8-91/211